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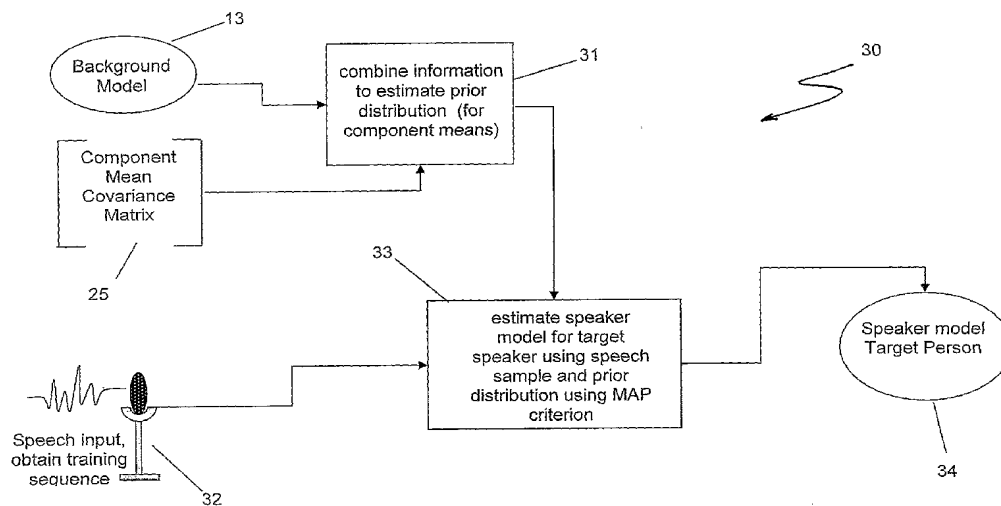
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(54) Title: MODEL ADAPTATION SYSTEM AND METHOD FOR SPEAKER RECOGNITION



(57) Abstract: A system and method for speaker recognition speaker modelling whereby prior speaker information is incorporated into the modelling process, utilising the maximum a posteriori (MAP) algorithm and extending it to contain prior Gaussian component correlation information. Firstly a background model (10) is estimated. Pooled acoustic reference data (11) relating to a specific demographic of speakers (population of interest) from a given total population is then trained via the Expectation Maximization (EM) algorithm (12) to produce a background model (13). The background model (13) is adapted utilising information from a plurality of reference speakers (21) in accordance with the Maximum A Posteriori (MAP) criterion (22). Utilizing MAP estimation technique, the reference speaker data and prior information obtained from the background model parameters are combined to produce a library of adapted speaker models, namely Gaussian Mixture Models (23).

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